

AMENDMENT

Kindly amend the application, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents as follows.

IN THE SPECIFICATION:

Kindly amend the specification, without prejudice, without admission, without surrender of subject matter, and without any intention of creating any estoppel as to equivalents, to read as follows:

Please rewrite the paragraph on page 8, lines 11-14, as follows:

Figure 11 describes primers for constructions pC5 H6p WNV prM-M-E donor plasmids with a truncated H6p and/or truncated WNV capsid leader sequence (SEQ ID Nos ~~OS: 48, 49, 50, 62, 63, 64 and 65~~ **63, 62, 50, 49, 48, 65, and 64, respectively in order of appearance**).

Additionally, **a fragment of** the full length sequence of H6p 5'WNV sequence in vCP2017 is depicted (~~portions of~~ **as bases 1861-2160 of** SEQ ID Nos **NO: 60 and residues 1-52 of SEQ ID NO: 61**).

Please rewrite the paragraph on page 8, lines 17-18, as follows:

Figure 13 (SEQ ID NO:77) is the sequence of a 5 kb segment of canarypox DNA, encoding an ORF designated C5 initiating at position 1864 and terminating at position 2187 **(SEQ ID NO: 78). The oligonucleotides shown are disclosed as SEQ ID NOS 79-81, respectively in order of appearance.**

Please rewrite the paragraph on page 8, line 19, as follows:

Figure 14 depicts the sequence of a 232 bp VQ/H6p/MCS fragment. **The nucleotide and amino acid sequences are disclosed as SEQ ID NOS 82 and 83, respectively.**

Please rewrite the paragraph on page 45, line 20, to page 46, line 4, as follows:

Figure 13 (SEQ ID NO: 77) is the sequence of a 5 kb segment of canarypox DNA, encoding an ORF designated C5 initiating at position 1864 and terminating at position 2187. The following describes a C5 insertion plasmid constructed by deleting the majority of the C5

ORF and replacing it with the Virogenetics VQ marker, the H6 promoter, a multiple cloning site (MCS) and transcriptional and translational termination sequences in all reading frames. A 1590 bp PCR fragment, containing the upstream C5R arm is amplified from genomic canarypox DNA using primers C5A1 (SEQ ID NO:67 76) and C5B1(SEQ ID NO:68). This fragment includes an EcoR I site at the 5'-end, termination sequences and an MCS containing BamH I, Cla I and Xma I sites at the 3'-end. A 458 bp PCR fragment, containing the downstream C5L arm is amplified from genomic canarypox DNA using primers C5C1 (SEQ ID NO:69) and C5D1(SEQ ID NO:70). The fragment includes 5' BamH I, Cla I and Xma I sites, termination sequences and a Pst I site at the 3'-end. The PCR fragments were fused together by re-amplifying with primers C5A and C5D, generating a 2030 bp EcoR I – Pst I fragment, which is cloned into pUC 8, generating pUC/C5L/B Cla Xm/C5R. Oligonucleotides (SEQ ID NO:71) were used to introduce a unique Not I sequence at the 5'-end of the C5R arm, by inserting into the EcoR I site, generating pUC/Not I/C5R/MCS/C5L.

Please rewrite the paragraph on page 46, lines 5-15, as follows:

The Virogenetics VQ marker is contained on plasmid pRW823 and the vaccinia H6 promoter is contained on plasmid pBSH6-1. An 82 bp fragment containing the VQ marker and a 5' BamH I site, was PCR amplified from pRW823 using primers VQA1 (SEQ ID NO:72) and VQB1 (SEQ ID NO:73). A 176 bp fragment containing the H6 promoter and recognition sequences for a multiple cloning site containing Asp718 I, Xho I, Xba I, Cla I and Sma I, was amplified using primers H6A1 (SEQ ID NO:74) and H6B1 (SEQ ID NO:75). The VQ and H6 fragments were pooled and re-amplified using primers VQA1 and H6B1 to generate a 232 bp VQ/H6p/MCS fragment (Figure 14, SEQ ID NO:76 82) that was inserted into pUC/C5L/B Cla Xm/C5R between the BamH I and Xma I sites. Figure 15 shows the resultant plasmid, pNVQH6C5LSP-18, a C5 insertion plasmid containing the H6 promoter, transcription and translation terminators functional in all reading frames, and a MCS.

Please rewrite the paragraph on page 46, line 17, to page 47, line 10, as follows:

Sequences of the PCR primers and oligonucleotides:

Primer C5A1 (SEQ ID NO:67 76)

5' GGCCGAATTCTGAATGTTAAATGTTATACTTT 3'

Primer C5B1 (SEQ ID NO:68)

5' CCCGGGATCGATGGATCCTTTTTATAGCTAATTAGTCACGTACCTTTGAGAGTACCACT
TCAGCTA 3'

Primer C5C1 (SEQ ID NO:69)

5' GGATCCATCGATCCCGGGTTTTATGACTAGTTAATCACGGCCGCTTATAAAGATCTAA
AATGCAT 3'

Primer C5D1 (SEQ ID NO:70)

5' GGCTGCAGGTATTCTAAACTAGGAATAGAT 3'

Oligonucleotide for Not I (SEQ ID NO:71)

5' AATTGCGGCCGC 3'

Primer VQA1 (SEQ ID NO:72)

5' AAAGGATCCGGGTAAATTAATTAGTCATC 3'

Primer VQB1 (SEQ ID NO:73)

5' AATAAAGAAGCTCTAATTAATTAACGAGCAGATA 3'

Primer H6A1 (SEQ ID NO:74)

5' TCGTTAATTAATTAGAGCTTCTTTATTCTATACTTAAAAAG 3'

Primer H6B1 (SEQ ID NO:75)

5' AAAACCCGGGATCGATTCTAGACTCGAGGGTACCTACGATACAACTTAACGGATA
3'

Please rewrite the paragraph on page 49, lines 8-24, as follows:

In order to introduce a 5' Kozak sequence, the Pst I-EcoR V fragment of pDS-2933-2-2 was replaced by annealed oligonucleotides 7743.SL and 7744.SL, generating clone pSL-5448-1-1, pVR1012 *prM-M-E*. The sequence of the WNV *prM-M-E* region is shown in Figure 8.

		K P T I D V K M (SEQ ID NO: 46)
7617.SL	5'	AAGCCTACCAATCGATGTGAAGATG (SEQ ID NO: 42)
		Cla I
		L L F L S V N V H A * Xba I
7601.SL	3'	CTGCTCTTCCTCTCCGTGAACGTGCACGCTTAATTTTATCTAGAGGGCCC
		GACGAGAAGGAGAGGCACTTGCACGTGCGAATTAAAAATAAGATCTCCCGGG
		(SEQ ID NOS 45, 44 and 43, respectively, in order of appearance)
		Pst I Kozak

7743.SL 5' GCCGCC^MACCATGGG (SEQ ID NO: 84)
7744.SL 3' ACGTCGGCGGTGGTACCC (SEQ ID NO: 85)

Please rewrite the paragraph on page 63, lines 21-32, as follows:

In order to remove the poly-His tag and introduce a translation stop and terminal T5NT, the 1.4 kb 3' fragment from pDS-2897-5-1 was PCR amplified using primers 7617.SL (SEQ ID NO: 42) and 7601.SL (SEQ ID NO: 43).

7617.SL 5' K P T I D V K M SEQ ID NO: 46
AAGCCTACC^{Cla I}ATCGATGTGAAGATG 3' SEQ ID NO: 42
SEQ ID Nos ~~OS~~ 45, 44 and 43, respectively in order of appearance
L L F L S V N V H A * Xba I
7601.SL 3' CTGCTCTTCCTCTCCGTGAACGTGCACGCTTAATTTTATCTAGAGGGCCC
GACGAGAAGGAGAGGCACTTGCACGTGCGAATTAAAAATAGATCTCCCGG 5'

Please rewrite the paragraph on page 64, lines 1-12, as follows:

The 0.7 kb EcoR V-Cla I 5'-end of the WNV gene cassette was PCR amplified using primers 7600.SL (SEQ ID NO: 47) and 7616.SL (SEQ ID NO: 48) and the fragment inserted into pCR2.1 to generate plasmid pDS-2905-2-1

SEQ ID Nos ~~OS~~ 51 and 47, respectively in order of appearance
EcoR V H6p M T G I A V M I G L
7600.SL 5' ATCGC^{EcoR V}GATATCGTTAAGTTTGTATCGTAATGACCGGAATTGCAGTCATGATTGGCCTG
7616.SL 3' TTCGGATGGTAGCTACACTTCTAC 5'
K P T I D V K M SEQ ID NO: 50
AAGCCTACC^{Cla I}ATCGATGTGAAGATG SEQ ID NO: 49
SEQ ID NO: 48

Please rewrite the paragraph on page 73, lines 17-30, as follows:

There is one commonly used recombination site in the Fowlpox genome, designated as F8. Plasmid pMAW112-2/F8 AIV HA has been described in patent application xxx and was used as the source of the Fowlpox F8 arms. The 1.7 kb AIV HA insert in pMAW112-2/F8 AIV HA was deleted by digestion with Nru I and Hind III, to be replaced by oligonucleotides 7737.SL (SEQ ID NO: 52) and 7738.SL (SEQ ID NO: 53) encoding the 3'-end of the H6 promoter and a Sma I/Xma I site. The correct insertion of the oligos was confirmed in plasmid pF8 H6p MCS, pSL-5440-5-1. This plasmid contains ~1.4 kb of the upstream F8 flanking sequence, designated as F8R and ~1.4 kb of the downstream

flanking sequence of F8, designated as F8L, as well as the H6 promoter and a multiple cloning site of Xma I, Hind III, BamH I and Xho I.

SEQ ID Nos ~~OS~~ 52 and 53

		H6p	Xma I	
7737.SL	5'	CGATATCCGTTAAGTTTGTATCGTAATG	<u>CCCGGG</u>	TCGCGAA 3'
7738.SL	3'	GCTATAGGCAATTCAAACATAGCATTACGGGCCCAGCGCTTTCGA		<u>35</u> '

After the last page of the specification, and before the first page of the claims, kindly replace the pages thereat with the enclosed pages entitled:

--Sequence Listing--.